INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	3382-65018
Application Number	10/656,301
Filing Date	September 4, 2003
First Named Inventor	Lee
Art Unit	2621 267 V
Examiner Name	- Andropo

U.S. PATENT DOCUMENTS

Examiner's Initials* Cite No. (optional) Number Date Name CLASS 5,778,098 7.7.1998 Lee et al. 282/24 5,933,535 8.3.1999 Lee et al. 382/24 5,970,173 10.19.1999 Lee et al. 282/23 6,037,988 3.14.2000 Gu et al. 271/240			
5,933,535 8.3.1999 Lee et al. 3 82/24 5,970,173 10.19.1999 Lee et al. 3 82/23			
5,970,173 10.19.1999 Lee et al. 387/23	36		
504C5	3		
6,037,988 3.14.2000 Gu et al. 275/940	S		
1 1 2 2 2	16		
6,215,496 4.10.2001 Szeliski et al. 345/4	q		
US-2003-0138150-A1 7.24.2003 Srinivasan et al 382/25	6		
US-2003-0156646-A1 8.21.2003 Hsu et al. 375/240	1.16		
Examiner's Cite No. OTHER DOCUMENTS	OTHER DOCUMENTS		
ISO/IEC, "ISO/IEC 11172-2, Information technology - Coding of moving pictures and	ISO/IEC, "ISO/IEC 11172-2, Information technology - Coding of moving pictures and		
	associated audio for digital storage media at up to about 1,5 Mbit/s - Part 2: Video, 112		
Ebrahimi, "MPEG-4 Video Verification Model: A video encoding/decoding algorithm			
based on content representation," 30 pp. (1997).			
ISO/IEC, "JTC1/SC29/WG11 N2202, Information Technology - Coding of Audio-Vis	ual		
Objects: Visual, ISO/IEC 14496-2," 329 pp. (1998).			
ITU-T, "ITU-T Recommendation H.261, Video Codec for Audiovisual Services at p x	ITU-T, "ITU-T Recommendation H.261, Video Codec for Audiovisual Services at p x 64		
kbits," 25 pp. (1993).			
ITU-T, "ITU-T Recommendation H.262, Information Technology - Generic Coding of			
Moving Pictures and Associated Audio Information: Video," 205 pp. (1995).			
ITU-T, "ITU-T Recommendation H.263, Video coding for low bit rate communication	,"		
162 pp. (1998).			
"JPEG Image Coding Standard," 23 pp. [Downloaded from the World Wide Web on			
February 23, 2004.]			

EXAMINER SIGNATURE:	Anh Do	DATE CONSIDERED:	6/2/07	

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

MS 302243.02

FORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	3382-65018-01
Application Number	10/656,301
Filing Date	September 4, 2003
First Named Inventor	Lee .
Art Unit	2621-2624
Examiner Name	not yet assigned in

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of	Applicant or Patentee
AD		5,617,144	April 1, 1997	Lee	375/24016
		5,970,173	October 19, 1999	Lee et al.	382/236
		6,369,835	April 9, 2002	Lin	715/726
	·	6,392,705	May 21, 2002	Chaddha	375/240.24
		6,650,705	November 18, 2003	Vetro et al.	375/240.08
		6,728,317	April 27, 2004	Demos	375/240.21
AD		RE 35,910	September 29, 1998	Nagata et al.	348/416.1
Examiner's Initials*	Cite No. (optional)		OTHER DOC	UMENTS	1
AD		Wu et al., "Joint estimation of forward and backward motion vectors for interpolative prediction of video," <i>IEEE Transactions on Image Processing</i> , Vol. 3, No. 5, pp. 684-687, Sept. 1994.			
AD		Reader, "History of MPEG Video Compression – Ver. 4.0," 99 pp., document marked December 16, 2003.			
,					

EXAMINER SIGNATURE: AD A DO CONSIDERED: C 9 H (17)			
7 (VO 176 CONSIDERED. G COS (147)	EXAMINER SIGNATURE: AND DO	DATE CONSIDERED:	24/07

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THEORY ATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number 3382-65018-01
Application Number 10/656,301
Filing Date September 4, 2003
First Named Inventor Lee
Art Unit 2621 7674
Examiner Name

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U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of A	Applicant or Patentee
AD		5,929,902	7.27.1999	Kwok	348/96/
		6,058,212	5.2.2000	Yokohama	382/236
		6,178,205	1.23.2001	Cheung et al.	375/240.29
AD		6,594,313	7.15.2003	Hazra et al.	375/240.16

U.S. PATENT APPLICATION DOCUMENTS

U.S. PATENT APPLICATION DUCUMENTS					
Examiner's Initials*	Cite No. (optional)	Number Publication Date Name of Applicant			
AD		2004/0001705	1.1.2004	Soupliotis et al. 386/17	
AD		2005/0254584	11.17.2005	Kim et al. 375/240.27	
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS			
AD		Anandan et al., "Hierarchical Model-Based Motion Estimation," Kluwer Academic Publishers, Boston, pp. 1-22 (1993).			
		Avid Technology, Inc., materials downloaded from World Wide Web, 11 pp. (downloaded from World Wide Web on February 18, 2005).			
		Barron et al., "Performance of Optical Flow Techniques," IJCV, Vol. 12, No. 1, pp. 43-77 (1994).			
	Beauchemin et al., "The Computation of Optical Flow," ACM Computing Surveys, Vol. 27, No. 3, pp. 433-467 (1995).				
	Bugwadia et al., "Progressive-Scan Rate Up-Conversion of 24/30 Hz Source Materials for HDTV," <i>IEEE Transactions on Consumer Electronics</i> , Vol. 42, No. 3, pp. 312-321 (1996).				
AD		Cafforio et al., "Motion Compensated Image Interpolation," IEEE Transactions on Communication, Vol. 38, No. 2, pp. 215-222 (1990).			

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Art Unit	2621 26211
Examiner Name	And Do

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
AD		Chang et al., "Simultaneous Motion Estimation and Segmentation," <i>IEEE Transactions on Image Processing</i> , Vol. 6, No. 9, pp. 1326-1333 (1997).
		DynaPel Systems, Inc., materials downloaded from World Wide Web, 20 pp. (downloaded from World Wide Web on February 18, 2005).
		Efstratiadis et al., "Motion Field Prediction and Restoration for Low Bit-Rate Video Coding," Proc. 2nd International Conference on Image Processing (ICIP 95), 4 pp. (October 1995).
		Ghosal et al., "A Fast Scalable Algorithm for Discontinuous Optical Flow Estimation," <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , Vol. 18, No. 2, pp. 181-194 (1996).
		Guleryuz, "Iterated Denoising for Image Recovery," IEEE, 10 pp. (marked April 2002).
		Hendriks et al., "Recursive Disparity Estimation Algorithm for Real Time Stereoscopic Video Applications," <i>IEEE International Conference on Image Processing</i> , pp. 891-894 (September 1996).
		Horn et al., "Determining Optical Flow," Artificial Intelligence, pp. 185-203 (1980).
		Kim et al., "Local motion-adaptive interpolation technique based on block matching algorithms," Signal Processing: Image Communication, Vol. 4, pp. 519-528 (1992).
		Krishnamurthy et al., "Frame Interpolation and Bidirectional Prediction of Video using Compactly-Encoded Optical Flow Fields and Label Fields," <i>IEEE Transactions for Circuits and Systems for Video Technology</i> , 30 pp. (1996).
		Lucas et al., "An Iterative Image Registration Technique with an Application to Stereo Vision," <i>Proceedings of Imaging Understanding Workshop</i> , pp. 121-130 (1981).
		Martins, "Real-time Video Frame Rate Adaptation Based on Warping of Edge-Preserving Meshes," <i>ICIP</i> , pp. 948-952 (1999).
		Morimoto et al., "Automatic Digital Image Stabilization," Proc. of IEEE International Conference on Pattern Recognition, Vienna, Austria, 6 pp. (August 1996).
		Ribas-Corbera et al., "Interframe Interpolation of Cinematic Sequences," Journal of Visual Communication and Image Representation, Vol. 4, No. 4, pp. 392-406 (1993).
		Shum et at., "Panoramic Image Mosaics," Technical Report MSR-TR-97-23, 53 pp.
·		Simoncelli, "Bayesian Multi-Scale Differential Optical Flow," <u>Differential Formulation</u> , pp. 397-422 (1998).

EXAMINER SIGNATURE:	Anh Do	DATE CONSIDERED:	6/	24	6) .	

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Application Number	10/656,301		
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Art Unit	262T CBUY		
Examiner Name	Anle		

La		1 7 N/4/8		
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS		
AD		Stiller et al., "Estimating Motion in Image Sequences, A tutorial on modeling and computation of 2D motion," <i>IEEE Signal Processing</i> , 36 pp. (1999).		
		Sullivan et al., "The H.264/AVC Advanced Video Coding Standard: Overview and Introduction to the Fidelity Range Extensions," 21 pp. (August 2004).		
		Thoma et al., "Motion Compensating Interpolation Considering Covered and Uncovered Background," Signal Processing: Image Communication, Vol. 1, pp. 191-212 (1989).		
		Tubaro et al., "Motion Field Estimators and their Application to Image Interpolation," <u>Motion Analysis and Image Sequence Processing</u> , Kluwer Academic Publishers, Chapter 6, pp. 153-187 (1993).		
10		Zhang et al., "Piecewise linear motion-adaptive interpolation," Signal Processing: Image Communication, Vol. 4, pp. 93-99 (1991).		

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EXAMINER SIGNATURE:	Ann Do	DATE CONSIDERED:	8/24/07	

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